

AMENDMENTS TO THE CLAIMS

33. (Currently amended) A method for testing a plurality of integrated circuits, including the steps of:

performing a plurality of tests on the plurality of integrated circuits, each of said integrated circuits having a unique identifier stored in a machine readable device;

identifying integrated circuits that failed at least one of the plurality of tests by reading said unique identifier and identifying tests failed by the integrated circuits; and

for each of said plurality of integrated circuits which has failed at least one of the plurality of tests, creating a set of at least one test as a function of the unique identifier of a failed ~~chip~~ integrated circuit and repeating said set of at least one test on the failed-chip integrated circuit.

34. (Previously presented) The method of claim 33, wherein said machine readable device is a set of anti-fuses and said unique identifier is read by reading said set of anti-fuses.

35. (Previously presented) The method of claim 33, wherein said machine readable device is a non-volatile memory circuit and said unique identifier is read by reading said non-volatile memory circuit.

36. (Currently amended) The method of claim 35, wherein said non-volatile memory circuit is a FLASH memory circuit and said unique identifier is read by reading said FLASH memory circuit.

37. (Currently amended) The method of claim 35, wherein said non-volatile memory circuit is an electrical programmable read only memory (EPROM) circuit and said unique identifier is read by reading said EPROM memory circuit.

38. (Currently amended) The method of claim 35, wherein said non-volatile memory circuit is a read only memory (ROM) circuit and said unique identifier is read by reading said ROM memory circuit.

39. (Previously presented) The method of claim 33, wherein said machine readable device is a content addressable memory circuit (CAM) and said unique identifier is read by reading said CAM memory circuit.

40. (Currently amended) An apparatus for testing a plurality of integrated circuits, comprising:

means for performing a plurality of tests on the plurality of integrated circuits;

means for reading a unique identifier from each integrated ~~circuits~~circuit that failed at least one of the plurality of tests and identifying tests failed by the integrated circuits; and

means for repeating at least one identified failed test on each of the integrated circuits which failed at least one test.

41. (Previously presented) The apparatus of claim 40, wherein said means for reading comprises a circuit for reading the unique identifier from a set of anti-fuses.

42. (Previously presented) The apparatus of claim 40, wherein said means for reading comprises a circuit for reading the unique identifier from a non-volatile memory.

43. (Previously presented) The apparatus of claim 42, wherein said means for reading comprises a circuit for reading the unique identifier from a FLASH memory.

44. (Currently amended) The apparatus of claim 42, wherein said means for reading comprises a circuit for reading the unique identifier from an electrical programmable read only memory (EPROM).

45. (Previously presented) The apparatus of claim 42, wherein said means for reading comprises a circuit for reading the unique identifier from a read only memory (ROM).

46. (Previously presented) The apparatus of claim 40, wherein said means for reading comprises a circuit for reading the unique identifier from a content addressable memory (CAM).

47. (Currently amended) An apparatus for testing a plurality of integrated circuits, said apparatus comprising:

a testing device for performing a plurality of tests on said plurality of integrated circuits, each of said plurality of integrated circuits having a unique circuit identifier stored in an identification circuit; ~~and~~

a processor to control said testing device, said processor identifying each of said plurality of integrated circuits that failed at least one of said plurality of tests and identifying tests failed by each of said plurality of integrated circuits; and

a memory for storing said unique circuit identifier for each of said plurality of integrated circuits that failed at least one of said plurality of tests,

wherein said testing device repeats at least one identified failed test on each of the integrated circuits that failed at least one of said plurality of tests.

48. (Previously presented) The apparatus of claim 47, wherein said identification circuit is a set of anti-fuses.

49. (Previously presented) The apparatus of claim 47, wherein said identification circuit is a non-volatile memory.

50. (Previously presented) The apparatus of claim 49, wherein said non-volatile memory is a FLASH memory.

51. (Currently amended) The apparatus of claim 49, wherein said non-volatile memory is an electrical programmable read only memory (EPROM).

52. (Previously presented) The apparatus of claim 49, wherein said non-volatile memory is a read only memory (ROM).

53. (Previously presented) The apparatus of claim 47, wherein said identification circuit is a content addressable memory (CAM).

54. (Currently amended) A system comprising:

a device tester adapted to perform a principal functional test on an integrated circuit having one or more functional circuit portions and produce principal result information indicating respective operation or failure of said one or more functional circuit portions;

a reader adapted to read an identification device on said integrated circuit so as to ascertain an identity of said integrated circuit; ~~and~~

a recording medium adapted to record said identity and said result information and maintain an association therebetween; and

a device repair apparatus adapted to repair said integrated circuit in response to principle result information indicating failure of said one or more functional circuit portions.

55. (Previously presented) The system of claim 54, wherein said identification device is a set of anti-fuses.

56. (Previously presented) The system of claim 54, wherein said identification device is a non-volatile memory.

57. (Previously presented) The system of claim 56, wherein said non-volatile memory is a FLASH memory.

58. (Currently amended) The system of claim 56, wherein said non-volatile memory is an electrical programmable read only memory (EPROM).

59. (Previously presented) The system of claim 56, wherein said non-volatile memory is a read only memory (ROM).

60. (Previously presented) The system of claim 54, wherein said identification device is a content addressable memory (CAM).